

Amendments to the Claims:

Please cancel claims 1-10 as presented in the underlying International Application No. PCT/DE2004/00047.

Please add new claims as indicated in the listing of claims below.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 11 (new): A method for transmitting a data word containing a sequence of individual data in sequential data positions, the method comprising:

making a code word supply available, a number of individual codes words of the supply corresponding at least to the number of data positions of the data word, a cross-correlation function of each code word with a specific reference having in each case a distinct, detectable extreme value having a position is characteristic of the individual code word;

assigning an individual code word of the number of code words to each data position of the data word;

combining the assigned code word with the particular datum of the data position so as to form a data position-specific combination result;

summing the data position-specific combination results to form a sum word;

transmitting the sum word to a receiver;

cross-correlating the received sum word with a further reference, the further reference, when cross-correlated with each code word, having in each case a distinct, detectable extreme value having a position being characteristic of the individual code word; and

reconstructing from the position and magnitude of the values of the thus formed correlation function, the particular data position-specific data of the data word in that, following the fixed assignment, a corresponding datum is assigned to each value.

Claim 12 (new): The method as recited in claim 1 wherein the code words are formed by cyclical shifting of an m-sequence, a Barker code, a Gordon Mills Welch (GMW) sequence or a Gold

code.

Claim 13 (new): The method as recited in claim 1 wherein the code words are formed by cyclical shifting of a complementary code keying code.

Claim 14 (new): The method as recited in claim 1 wherein unipolar dual values (0,1) are permitted for the data word.

Claim 15 (new): The method as recited in claim 1 wherein bipolar dual values (-1,1) are permitted for the data word.

Claim 16 (new): The method as recited in claim 1 wherein ternary or higher base number systems being permitted for the data word.

Claim 17 (new): The method as recited in claim 1 wherein bipolar sequences are used as code words.

Claim 18 (new): The method as recited in claim 11 wherein the sum word is modulated for transmitting multiphase shift keying and, in the process, a multiphase shift keying modulation stage is used that is of a higher level than would be necessary based on the number of possible values that the sum word is able to assume.

Claim 19 (new): The method as recited in claim 11 wherein the sum words are provided with a cyclic extension dimensioned so that, in spite of transmission-induced sum word interferences within a correlation window), only sum word components occur which originate from one single, original sum word.

Claim 20 (new): A method for transmitting a data word containing a sequence of individual data in sequential data positions, the method comprising the steps of:

making a code word supply available, a number of individual codes words of the supply corresponding at least to a number of data positions of the data word;

using as the code words at least two sets of sufficiently orthogonal sequences so that a cross-correlation function of code words of the first set with a specific first set reference has a distinct, detectable extreme value and a cross-correlation function of code words of the second set with a specific second set reference has a second distinct, detectable extreme value, a position being characteristic in each case of the individual code word of the particular code word set, the first cross-correlation function of the code words of the first set with the second set reference of the second set and the second cross-correlation function of code words of the second set with the first set reference not having any distinct, detectable extreme value;

assigning an individual code word of the number of code words to each data position of the data word;

combining the assigned code word with the particular datum of the data position, forming a data-position specific combination result;

summing the data position-specific combination results to form a sum word;

transmitting the sum word to a receiver;

cross-correlating the received sum word in each case with a first and a second set receiving reference, the cross-correlation function of the code words of the first set with the first set receiving reference having a distinct, detectable extreme value; and the cross-correlation function of code words of the second set with the second set receiving reference having a distinct, detectable extreme value having a position being characteristic in each case of the individual code word of the particular code word set; and

reconstructing from the position and magnitude of the values of the thus formed correlation functions, the particular data position-specific data of the data word in that, following the fixed assignment, a corresponding datum is assigned to each value.

Claim 21 (new): The method as recited in claim 20 wherein the sum word is modulated for transmitting multiphase shift keying and, in the process, a multiphase shift keying modulation stage is used that is of a higher level than would be necessary based on the number of possible values that the sum word is able to assume.

Claim 22 (new): The method as recited in claim 20 wherein the sum words are provided with a cyclic extension dimensioned so that, in spite of transmission-induced sum word interferences

within a correlation window), only sum word components occur which originate from one single, original sum word.